OVERLOAD PROTECTION CIRCUIT BREAKER REMOTE ALARM ANNUNCIATOR SYSTEM EMERGENCY STOP PUSHBUTTON ENGINE INSTRUMENTS SHOWING: ENGINE WATER TEMPERATURE LUBE OIL PRESSURE LUBE OIL TEMPERATURE ENGINE RUNNING HOURMETER BATTERY CHARGING INDICATOR ENGINE FAULT INDICATORS

ENGINE MOUNTED RADIATOR SAFETY CONTROLS TO SHUT DOWN THE ENGINE FOR THE FOLLOWING: LOW LUBRICATING OIL PRESSURE

LOW WATER LEVEL HIGH/LOW WATER JACKET TEMPERATURE ENGINE OVER SPEED ENGINE OVERCRANK

RESIDENTIAL GRADE SILENCER WATER JACKET HEATER, 1500W MINIMUM ISOCHRONOUS GOVENEROR BATTERY CHARGER (10 AMPS), LEAD ACID BATTERIES, BATTERY RACK & CABLES AND CLAMPS

GENERATOR CONTROL PANEL WITH THE FOLLOWING:

RECESSED FRONT PANEL HINGED RUBBER ISOLATOR

A.C. VOLTMETER, AMMETER, DIAL TYPE FREQUENCY METER

THREE POSITION SELECTOR SWITCH: MANUAL, OFF/RESET & AUTO BATTERY CHARGING VOLTMETER

ENGINE WATER TEMPERATURE GAUGE OIL PRESSURE GAUGE

D.C. CIRCUIT BREAKER

SHUTDOWN INDICATORS FOR ALARMS INDICATED ABOVE

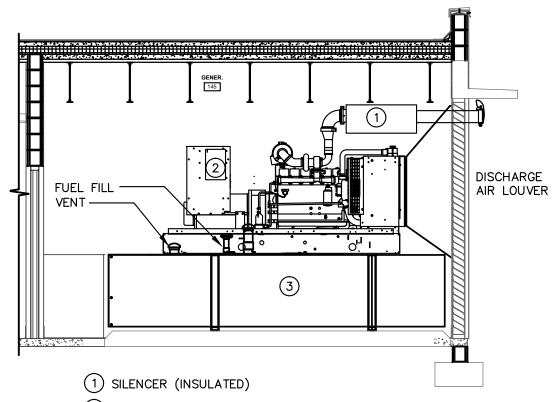
3000 GALLON IN BASE DOUBLE WALL DIESEL FUEL TANK, CAPABLE OF MINIMUM RUN TIME OF 168 HOURS. FUEL TANK SHALL BE A CUSTOM MADE FUEL TANK. 14'L x 9'-9"W x 3'h TO FIT THE ROOM. GENERATOR SHALL REST ON TOP OF TANK WITH SUPPORTS. PROVIDE STAIRS TO ACCESS TOP OF TANK IN GENERATOR ROOM.

1 YEARS MANUFACTURERS WARRANTY AND A 5 YEAR ENGINE WARRANTY

THE GENERATOR SHALL BE PROVIDED WITH AN AUTOMATIC STARTING SYSTEM TO PROVIDE MUTLIPLE CRANK/RESET CYCLES. OPERATION SHALL BE INITIATED THROUGH CLOSING OF CONTACTS IN THE AUTOMATIC TRANSFER SWITCH.

THE ENTIRE STANDBY SYSTEM SHALL BE TESTED WITH A DRY RESISTIVE LOAD BANK WHICH IS CAPABLE OF INCREMENTAL LOADING AND INCORPORATES A.C. VOLTMETER, AMP METER, FREQUENCY METER AND KILOWATT METER SO THAT NAME-PLATE RATINGS OF GENERATOR SET MAY BE VERIFIED. TEST SYSTEM AT FULL RATED OUTPUT FOR A PERIOD OF 4 HOURS.

THE GENERATOR SHALL BE PROVIDED WITH A BI-FUEL SYSTEM BY GTI-ALTRONIC (OF APPROVED EQUIVALENT). THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF THE SYSTEM WITH THE GENERATOR MANUFACTURER. SEE BI-FUEL LIT APPLICATION & 🔨 CONTENT CHART THIS SHEET FOR SYSTEM SIZE. SEE ADDITIONAL INFORMATION ON $\frac{\sqrt{500}}{200}$ SHEET E-7.5.



(2) GENERATOR CIRCUIT BREAKER

3 IN BASE DOUBLE WALL 2500 GALLON DIESEL FUEL STORAGE TANK FUEL CONSUMPTION 17.6 GAL/HR

4 ENLARGED SECTION PLAN GENERATOR ROOM E-7.3 1/4" = 1'-0"

TRANSFER SWITCH SEQUENCE OF OPERATION

COMMERCIAL POWER LOSS:

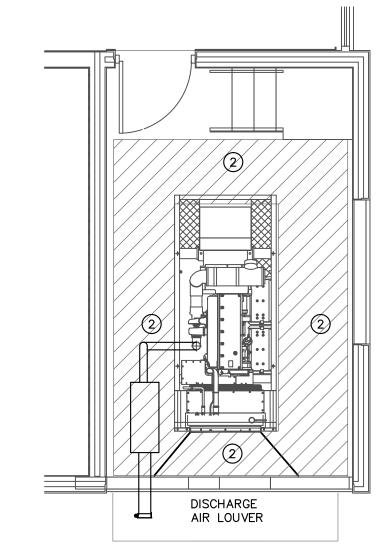
THE TRANSFER SWITCH SHALL MONITOR COMMERCIAL POWER. UPON COMMERCIAL POWER LOSS. THE TRANSFER SWITCH SHALL SEND A START SIGNAL TO THE GENERATOR. THE GENERATOR SHALL START, UPON CORRECT VOLTAGE & FREQUENCY, THE TRANSFER SWITCH SHALL TRANSFER ALL LOADS TO THE GENERATOR. ALL LOADS MUST BE TRANSFERED WITHIN 10 SECONDS OF POWER LOSS.

PHASE LOSS:

THE TRANSFER SWITCH SHALL MONITOR COMMERCIAL POWER FOR PHASE LOSS. UPON COMMERCIAL POWER SOURCE LOSS OF ANY PHASE, THE TRANSFER SWITCH SHALL SEND A START SIGNAL TO THE GENERATOR. UPON CORRECT VOLTAGE AND FREQUENCY OF THE GENERATOR SOURCE, THE TRANSFER SWITCH WILL TRANSFER ALL LOADS TO THE GENERATOR WITHIN 10 SECONDS OF PHASE LOSS.

COMMERCIAL SOURCE RETURN:

UPON RETURN OF COMMERCIAL SOURCE, THE TRANSFER SWITCH SHALL MONITOR COMMERCIAL POWER SOURCE FOR 25 MINUTES. IF AFTER 25 MINUTES, COMMERCIAL POWER IS STABLE, THE TRANSFER SWITCH SHALL RE-TRANSFER ALL BUILDING LOADS TO COMMERCIAL POWER AND SHALL START A 5 MINUTE COOL-DOWN OF THE GENERATOR. AFTER 5 MINUTES OF COOL-DOWN, THE TRANSFER SWITCH WILL STOP THE

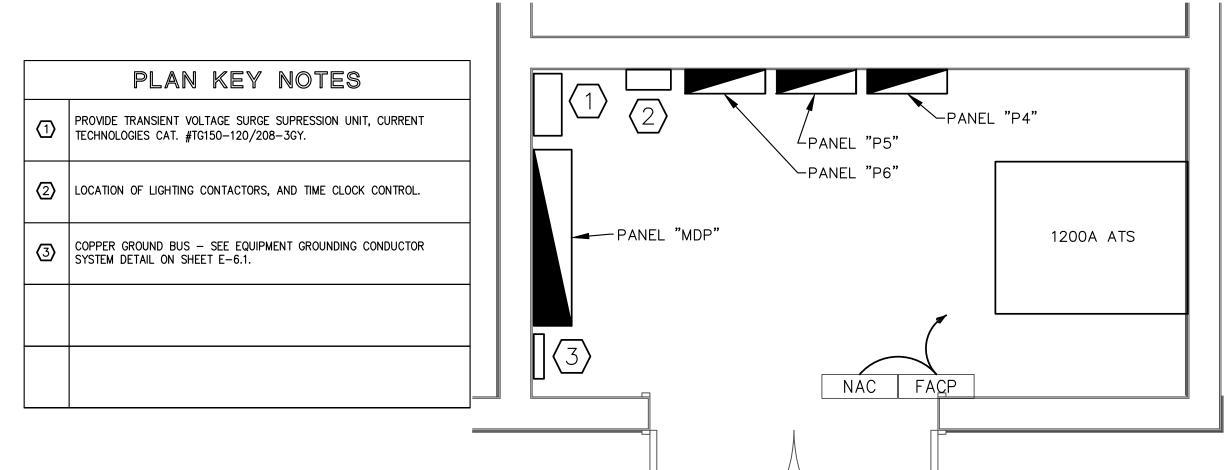


(1) SILENCER (INSULATED)

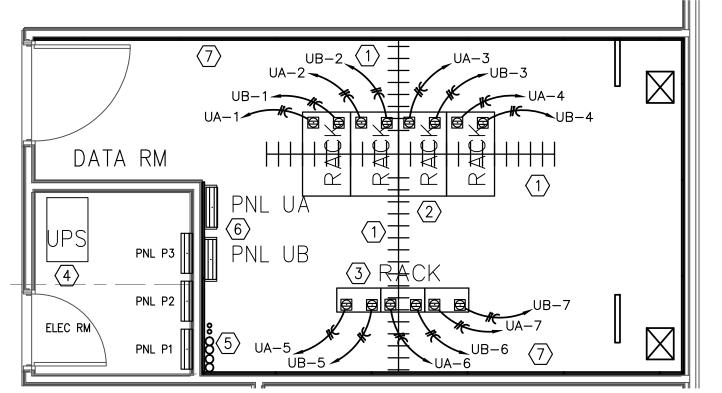
(2) IN BASE DOUBLE WALL 2500 GALLON DIESEL FUEL STORAGE TANK FUEL CONSUMPTION 17.6 GAL/HR

3 ENLARGED PLAN - 1ST FL. GENERATOR ROOM PLAN VIEW E-7.3 1/4" = 1'-0"





1 ENLARGED PLAN - 1ST FL. MAIN ELECTRICAL ROOM



 $\langle 1 \rangle$ CABLE TRAY $\langle 2 \rangle$ SERVER CABINET S (4) (3) TELCO RACK DEMARK

5\ TELCO SERVICE CONDUIT STUB $\langle 6 \rangle$ UPS ELEC PANELS (7) WOOD BACKBOARD

THOMPSON & YOUNGROSS

112 SOUTHEAST 10th STREET

DELRAY BEACH, FL 33483

www.tecfla.com

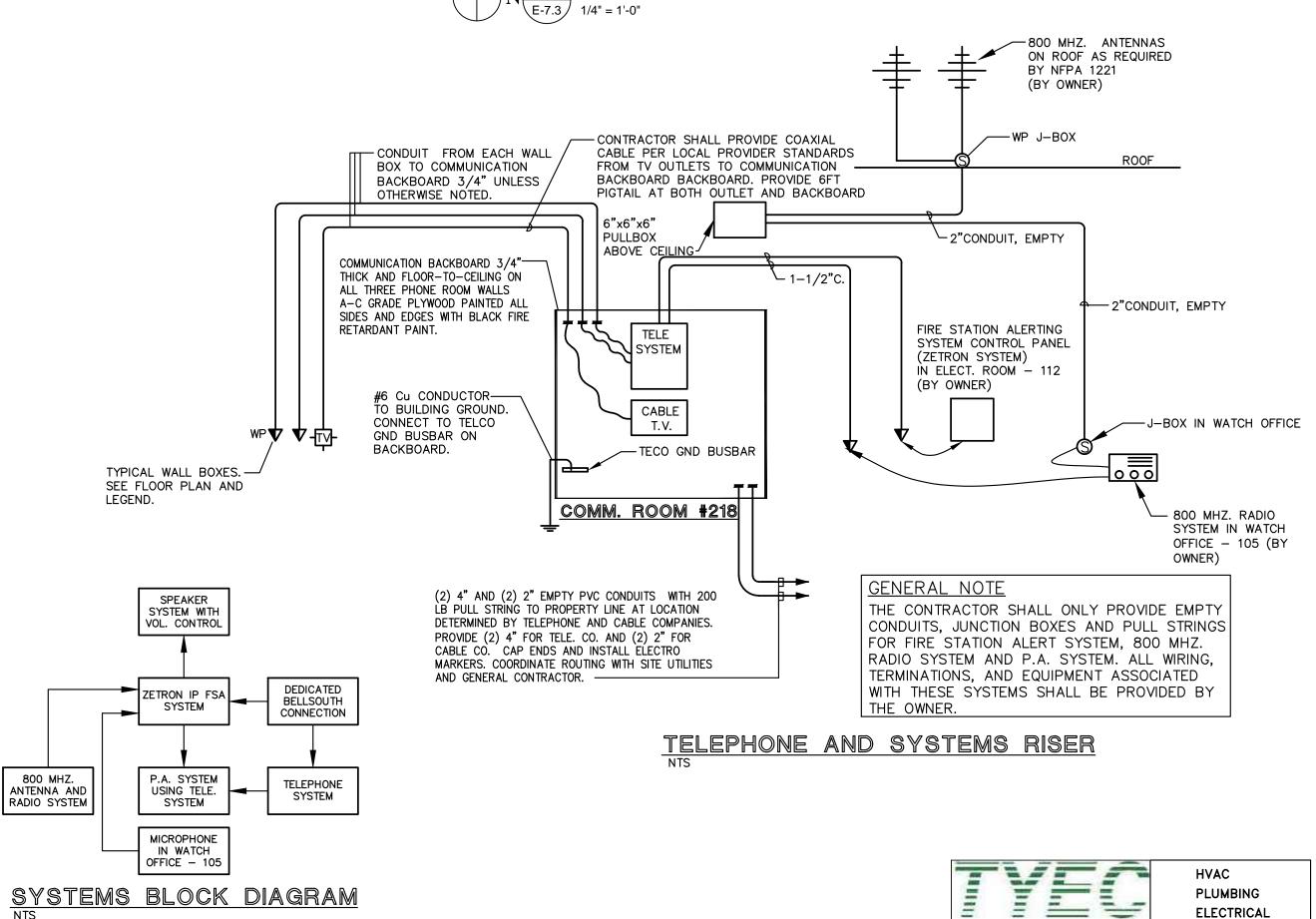
ENGINEERING CONSULTANTS, LLC CERTIFICATE of AUTHORIZATION NO. 25996

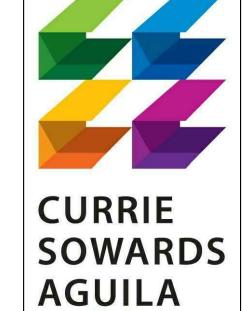
TEL: 561-274-0200

FAX: 561-274-0222 E-MAIL: tec@tecfla.com

(4) UPS LOCATION

\ ENLARGED PLAN - 2ND FL. COMPUTER/DATA ROOM





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ISSUED FOR: 10-13-14 BIDS

04-09-2015 PERMIT CONSTRUCTION

SEAL NO. 51758 STATE OF

PROJECT TITLE CITY OF **HALLANDALE** BEACH FIRE **RESCUE STATION**

111 FOSTER ROAD HALLANDALE BEACH, FL

33009 NUM. DESCRIPTION DATE 1 BUILDING DEPT. COMMENTS 3 BLDG DEPT. COMM./ COORDINATION 5 ADDENDUM

THIS PROJECT HAS BOOK SPECIFICATIONS THAT ARE AN INTEGRAL AND COMPLIMENTARY PART OF THE OF THE CONSTRUCTION DOCUMENTS. THESE DRAWINGS ARE PREPARED

PER ESTABLISHED INDUSTRY STANDARDS AND REPRESENT THE ARCHITECT AND ENGINEERS DESIGN CONCEPT. THEY ARE NOT INTENDED TO PROVIDE EVERY DETAIL OR CONDITION REQUIRED TO CONSTRUCT THE BUILDING. THE CONTRACTOR THROUGH SUBMITTALS AND OTHER COORDINATION EFFORTS IS FULLY RESPONSIBLE FOR PROVIDING A COMPLETE AND OPERATIONAL BUILDING WHETHER INDICATED ON THE PLANS OR NOT. FILE NUMBER

14069 E-7.3.DWG

DRAWING TITLE **ELECTRICAL** DETAILS AND ENLARGED ∾ PLANS

○ DATE DRAWN BY $01/14/2015 \mid MB,DJM,AD$ JOB NUMBER

140403/14069 DRAWING NUMBER